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Circular Letter: DHCQ:

TO: LTC Administrators
Nursing Directors

FROM: Madeleine Biondolillo, MD, Bureau Director
Iyah K. Romm, Policy Director

DATE: January 14, 2013

RE: Guidance on the admission/readmission of residents of long term care facilities diagnosed and treated for influenza or influenza-like illness at acute care hospitals during the 2012-2013 influenza season.

Consistent with national reports, Massachusetts is experiencing widespread influenza activity resulting in an increase in the number of people seeking emergency care and requiring hospital admission.

It has come to the attention of the Department that there have been instances where LTCFs have restricted admission or readmission to facilities when patients have been diagnosed and/or treated for influenza at an acute care hospital.

Please note the diagnosis of influenza is not a valid reason for denial of admission to a LTCF.

Preventing transmission of influenza virus within healthcare settings requires a comprehensive approach. Key prevention strategies include (1) administration of influenza vaccine, (2) implementation of respiratory hygiene and cough etiquette (3) appropriate management of ill healthcare employees, (4) adherence to infection control precautions for all patient-care activities and aerosol generating procedures and (5) implementing environmental infection control measures.

Included as an attachment, you will find *Control of Influenza and Pneumococcal Disease in Long-Term Care Facilities 2012 – 2013*. This guideline has been developed to assist long term care facilities in the prevention, surveillance, diagnosis and treatment of influenza.

Additional information is available at the following link: www.mass.gov/dph/flu

For residents with influenza-like illness requiring transport by Emergency Medical Services (EMS) to acute care facilities please ensure the resident's relevant medical history is communicated and appropriate precautions are implemented.

Annual influenza vaccination is the primary method for preventing influenza and its complications. Achieving maximum rates of coverage for patients and healthcare workers is an indicator of commitment to patient and healthcare worker safety. As a condition of licensure all long term care facilities are required to offer, free-of charge, annual influenza vaccine to all personnel (regular employees, contracted employees, volunteers, house staff and students), document receipt of influenza vaccine administered within and outside the facility or document the declination of immunization. The facility must also report information to the Department, detailing compliance with the vaccination requirement, in accordance with reporting and data collection guidelines of the Commissioner. The link to the reporting requirements and data collection form are available at the following link:

<http://www.mass.gov/eohhs/provider/licensing/facilities/health-care-facilities/influenza-vaccination-of-healthcare-facility-employees.html>

During this difficult influenza season all patients and health care workers without a valid contraindication to the vaccine should be vaccinated.

For questions regarding this communication, please contact:

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MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF EPIDEMIOLOGY AND IMMUNIZATION

CONTROL OF INFLUENZA AND PNEUMOCOCCAL DISEASE IN LONG-TERM CARE FACILITIES
2012 - 2013

Key Recommendations

- **Vaccinate all staff and residents against influenza every year.** Begin vaccinating as soon as vaccine is available.
- Use only oseltamivir or zanamivir for the treatment and prophylaxis of influenza.
- **Pneumococcal Vaccine:** Everyone 65 years of age and older should receive a dose of PPV23, unless they have received 2 doses of PPV23 before age 65. People aged 2 – 64 years with certain chronic medical conditions, people with immunocompromising conditions and people aged 19 – 64 years who smoke or who have asthma are also at risk. Administer a dose of pneumococcal vaccine to everyone in these groups who has not been previously vaccinated.
- **Tdap:** All adults aged 19 years and older, **including those 65 and older**, who have not yet received a dose of Tdap should receive a single dose.
- The Centers for Medicaid and Medicare Services (CMS) require nursing homes to offer all residents flu and pneumococcal vaccines.
www.cms.hhs.gov/NursingHomeQualityInits/downloads/NHQIVaccinationSupplement.pdf

Massachusetts Regulation Requires LTC Facilities to offer Flu Vaccine to Employees

Influenza is often introduced into and spread throughout a facility by staff or visitors. Flu vaccine may be less effective in the very elderly and some vaccinated LTC residents may remain susceptible. It is important to reduce their exposure to flu. HCP vaccination reduces mortality in elderly patients.

Regulation [105 CMR 150.002(D)(8)] requires LTC facilities to provide information about the risks and benefits of flu vaccine and flu vaccine at no cost to all employees. (MDPH Circular Letter: DHCQ 06-11-468 at www.mass.gov/Eeohhs2/docs/dph/quality/hcq_circular_letters/ltc_facilities_0611468.pdf.)

An updated Employee Immunization Campaign Toolkit is available online at www.massmed.org/AM/Template.cfm?Section=Flu, or by calling 781-419-2749.

Vaccination of Residents: Use a systematic approach to vaccination, with checklists, to increase immunization levels:

- Vaccinate residents against flu when vaccine is available. Vaccinate residents admitted from September through March on admission.
- Ensure that written policies include annual flu vaccination for residents and staff, and pneumococcal polysaccharide vaccine (PPV23) and Tdap vaccination for residents.
- Include Vaccine Information Statements (VIS) for PPV23, Tdap and flu vaccines in the admission packet. Vaccine Information Statements (VISs) for all vaccines in many languages: www.immunize.org/vis.

- Obtain consent for vaccination from the resident or family member on admission.
- Implement standing orders to administer flu, PPV23 and Tdap vaccines. These vaccines are safe and effective when administered simultaneously in separate syringes at different anatomical sites.
- Use chart audits to ensure that there is documentation in every chart that the resident has been offered PPV23 and Td vaccines and annual influenza vaccine.
- Consider residents with uncertain immunization histories NOT immunized and vaccinate accordingly. The benefits of vaccination far outweigh any concerns about revaccination.

Egg Allergies: ACIP recommends the following approach for administration of influenza vaccine to people with a history of egg allergy.

1. Individuals who have experienced only hives following exposure to egg should receive influenza vaccine with the following additional measures (Figure 2):

- a) Use TIV rather than LAIV;
- b) Vaccine should be administered by a healthcare provider who is familiar with the potential manifestations of egg allergy; and
- c) Observe vaccine recipients ≥ 30 minutes for signs of a reaction following administration of each vaccine dose.

Other measures, such as dividing and administering the vaccine by a two-step approach and skin testing with vaccine, are not necessary.

2. Persons who report having had reactions to egg involving such symptoms as angioedema, respiratory distress, lightheadedness, or recurrent emesis; or who required epinephrine or other emergency medical intervention, particularly those that occurred immediately or within a short time following egg exposure (minutes to hours) are more likely to have a serious systemic or anaphylactic reaction upon re-exposure to egg proteins. Prior to receipt of vaccine, refer such individuals to a physician with expertise in the management of allergic conditions for further risk assessment.

3. Administer all vaccines in settings in which personnel and equipment for rapid recognition and treatment of anaphylaxis are available. The ACIP recommends that all vaccination providers should be familiar with the office emergency plan.

4. Some individuals who report allergy to egg may not be egg-allergic. Those who are able to eat lightly cooked egg (e.g., scrambled egg) without reaction are unlikely to be allergic. Egg allergic persons may tolerate egg in baked products (e.g. bread, cake). Tolerance to egg-containing foods does not exclude the possibility of egg allergy. Confirm egg allergy by a consistent medical history of adverse reactions to eggs and egg-containing foods, plus a skin and/or blood testing for IgE antibodies to egg proteins.

5. A prior severe allergic reaction to influenza vaccine, regardless of the component suspected to be responsible for the reaction, is a contraindication to future receipt of the vaccine.

These recommendations are summarized in the algorithm below.

Figure 2. Recommendations Regarding Influenza Vaccination for People Who Report Allergy

to Eggs, 2012-2013 Flu Season.

*Persons with egg allergy might tolerate egg in baked products (e.g., bread or cake). Tolerance to egg-containing foods does not exclude the possibility of egg allergy.

Vaccination of Family Members and Visitors: Inform family members and other visitors about their role in the transmission of flu to patients and encourage them to get vaccinated. To find flu vaccine, they can call their health care provider or local board of health, visit www.mylocalfluclinic.com for a list of flu vaccination clinics by town, or call MDPH at 1-866-627-7968.

Medicare Part B Reimbursement for Administration of Flu and Pneumococcal Vaccines as of 1/1/2011 is \$27.19/dose in metro-Boston and \$24.78/dose in the rest of the state. For more information, see www.cms.hhs.gov/AdultImmunizations/.

Pneumococcal Vaccine: Everyone 65 years of age and older should receive a dose of PPV23, unless they have received 2 doses of PPV23 before age 65. People aged 2 – 64 years with chronic medical conditions and people aged 19 – 64 years who smoke or who have asthma are also at risk. Administer a dose of pneumococcal vaccine to everyone in these groups who has not been previously vaccinated.

A single revaccination, at least 5 years after initial vaccination, is recommended for people with:

- chronic renal failure or nephrotic syndrome;
- functional or anatomic asplenia (e.g., sickle cell disease or splenectomy); and
- immunocompromising conditions.

Tdap vaccine: During 2001 through 2008, 49% of tetanus cases in the U.S. were among persons 50 years of age or older. Across the nation, including in Massachusetts, there has been an increase in the number of cases of pertussis (whooping cough). Adults aged 19 years and older, including those older than 65, who have not yet received a dose of Tdap should receive a single dose. Currently, Tdap is recommended only for a single dose across all age groups. Providers should not miss an opportunity to vaccinate persons aged 65 years and older with Tdap. Therefore, providers may administer the Tdap vaccine they have available. When feasible, Boostrix should be used for adults aged 65 years and older; however, ACIP concluded that either vaccine administered to a person 65 years or older is immunogenic and would provide protection. A dose of either vaccine may be considered valid.

- **Tdap can be administered regardless of interval since the last tetanus- or diphtheria-toxoid containing vaccine.**
- **After receipt of Tdap, persons should continue to receive Td for routine booster immunization every 10 years**

Influenza Prevention and Control Measures

Strategies for the prevention and control of influenza in long-term care facilities include:

- Annual influenza vaccination of all residents and health-care personnel

- Age-appropriate vaccination of residents with pneumococcal vaccine
- Standard and droplet precautions with suspect or confirmed influenza cases
- Active surveillance and influenza testing for new illness cases
- Restriction of ill visitors and personnel
- Administration of antiviral medications for prophylaxis and treatment
- Handwashing and respiratory hygiene/cough etiquette programs

Surveillance, Testing and Reporting

Surveillance: Conduct surveillance for respiratory illness and use influenza testing to identify outbreaks so infection control measures can be promptly initiated in all settings, including inpatient and outpatient settings. Call DPH at 617-983-6800 for guidance and assistance with surveillance and control measures.

H3N2v: Over the past several months, CDC has confirmed human infection with a novel strain of influenza A H3N2 virus (referred to as influenza A(H3N2)v for “variant”) in a number of people. Formerly called swine-origin triple reassortant influenza A(H3N2), it is an influenza virus that contains genes from human, avian, and swine origins. To date, investigations of these cases revealed human infections with these viruses following contact with swine, particularly during agricultural fairs. Some human-to-human transmission has been reported, but appears limited at this time. CDC is monitoring the situation.

To date H3N2v has appeared to be similar to seasonal flu in terms of duration (3-5 days) and severity of illness; risk groups; infectious period (7 days from onset); and clinical management. Providers should consider prompt presumptive antiviral treatment of suspect cases. No cases of H3N2v have been reported in Massachusetts as of August 28, 2012.

For more information, see the [MDPH Clinical Advisory Regarding Influenza A \(H3N2v\)](#), and visit the CDC website [Interim Information for Clinicians about Human Infections with H3N2v Virus](#).

Influenza testing: Diagnostic testing for influenza can aid clinical judgment and guide treatment decisions and control measures.

- Diagnostic tests for influenza performed at the Hinton State Laboratory Institute (SLI) include viral culture and influenza RNA detection by polymerase chain reaction (PCR).
- Point of care rapid antigen testing capable of detecting influenza A and B virus infections is not routinely performed at the SLI but is widely available at hospitals, private providers, and other healthcare settings. Rapid influenza diagnostic tests have limited sensitivity and false negative results are common. False positive tests can also occur and are more likely when flu is rare in the community. For more information and guidance on use of rapid influenza diagnostic tests, visit CDC’s influenza website at www.cdc.gov/flu/professionals/diagnosis/clinician_guidance_ridt.htm. In addition, rapid antigen testing and commercially-available RT-PCR tests may not detect novel or variant strains of influenza and can not differentiate between seasonal and novel or variant influenza. Therefore, respiratory specimens should be collected from any patient suspected of having infection with H3N2 or any novel or variant strain of influenza and sent for reverse-transcription

polymerase chain reaction (RT-PCR) testing using CDC diagnostic panels at the **Hinton State Laboratory Institute**.

- When laboratory confirmation is desired, testing by RT-PCR and/or viral culture is recommended. PCR and viral culture testing also provide essential information on circulating influenza subtypes and strains.
- For information on influenza specimen collection and transportation, or to speak with an immunization epidemiologist, call MDPH at 617-983-6800. For specimen collection kits, call the kit room at the SLI at 617-983-6640.
- The MDPH Instructions for specimen submission can be found at:
www.mass.gov/eohhs/docs/dph/laboratory-sciences/flu-virus-collection.pdf
- The HSLI [Specimen Submission Form](http://www.mass.gov/eohhs/docs/dph/laboratory-sciences/flu-specimen-submission-form.pdf) can be found at
www.mass.gov/eohhs/docs/dph/laboratory-sciences/flu-specimen-submission-form.pdf

Reporting: In accordance with 105 CMR 300.000 (Reportable Diseases, Surveillance and Isolation and Quarantine Requirements), all positive laboratory findings indicative of influenza virus infection are reportable directly to MDPH.

Immediately report the following influenza-related cases by phone to the Division of Epidemiology and Immunization 617-983-6800 and to your local board of health. This applies to all strains of influenza:

- Deaths related to influenza in children under 18 and in pregnant women
- ICU admissions of pregnant women with influenza
- Confirmed cases of influenza with encephalopathy, myocarditis, or pericarditis
- Case(s) or clusters of ILI in long-term care facilities or in high risk settings
- Cases of antiviral treatment or prophylaxis failure
- Suspect novel or variant influenza, e.g., travel-associated, animal-associated, avian influenza, H3N2v

Clusters of ILI or ARI in daycare and elementary schools

Patients with unusual or severe presentations of ILI or ARI, especially young children

- ILI in employees of commercial swine farms

Providers in the city of Boston should report these cases directly to the Boston Public Health Commission.

Outbreaks in hospitals, long term care facilities and other entities licensed by the Division of Healthcare Quality (DHCQ) should also be reported to DHCQ at 800-462-5540 x8150.

For less severe influenza-related cases and situations, DPH has created a one-page form that providers can use to report individuals with suspect or confirmed influenza who are at high risk for complications (e.g., pregnant women, hospitalized cases). Please call (617) 983-6801 to obtain a copy of the *Influenza and ILI Significant Case Reporting Form*; reports can then be submitted via fax to DPH at (617) 983-6220. The goal of reporting such high risk cases is to track the progression of

influenza within the state on a real time basis.

For specific information about reporting, see the MDPH Reportable Diseases, Surveillance and Isolation and Quarantine Requirements website at www.mass.gov/eohhs/docs/dph/cdc/reporting/rdiq-reg-summary.rtf.

Please note that additional jurisdiction-specific reporting requirements may also apply. Healthcare providers and laboratories within the city of Boston must also report all cases of influenza and all laboratory tests positive for influenza directly to the Boston Public Health Commission (see www.bphc.org/ or contact BPHC at 617-534-5611 for additional information).

Additional information on the prevention and control of influenza can be found in the influenza chapter of the MDPH Guide to Surveillance, Reporting and Control, at www.mass.gov/eohhs/docs/dph/disease-reporting/guide/influenza.rtf.

Infection Control

Promptly implement the outbreak control measures described below and contact your local board of health, MDPH at 617-983-6800 and the Division of Healthcare Quality at 800-462-5540 x8150 in the event of any one of the following:

- 1. Influenza is confirmed by laboratory testing in at least one resident**
- 2. More than one resident in the facility or an area of the facility (e.g., separate unit) develops influenza-like illness (ILI) during a 1-week period.**
- 3. MDPH epidemiologists can facilitate testing and provide control recommendations in the event of an outbreak.** To prevent the transmission of all respiratory infections, including flu, implement the infection control measures listed below at the first point of contact with a potentially infected person. Incorporate these measures into infection control practices as one component of standard precautions. Find tools to help promote and implement these recommendations at www.cdc.gov/flu/professionals/infectioncontrol
- 4. Active surveillance and testing for new illness and cases:** Educate staff about the signs and symptoms of influenza-like illness. The ILI line list found on the MDPH website (can be used to collect and manage relevant information about ill residents and staff.
- 5. Respiratory hygiene/cough etiquette:** Post visual alerts in appropriate languages at the entrance to outpatient facilities (e.g., emergency departments, physician offices) instructing patients and people who accompany them (e.g., family, friends) to inform health care personnel of symptoms of a respiratory infection when they first register for care and to practice respiratory hygiene/cough etiquette. Posters, brochures and fact sheets promoting cough etiquette and handwashing in multiple languages are available from MDPH by calling 617-983-6800 or they can be downloaded from www.mass.gov/handwashing.
- 6. Use standard precautions with all patients and implement droplet precautions** (www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html) when caring for patients with suspected or confirmed influenza.

For more information and up-to-date recommendations for influenza infection control, visit the CDC website at: www.cdc.gov/flu/professionals/infectioncontrol.

- 7. Vaccination:** Assess the influenza and pneumococcal vaccination status of all patients and vaccinate appropriately as described above. Review influenza vaccination status of all staff as

well, and vaccinate any susceptible staff.

8. **Antiviral drugs** are an adjunct to, not a substitute for, vaccination for preventing and controlling influenza. The neuraminidase inhibitors oseltamivir (Tamiflu®) and zanamivir (Relenza®) are currently recommended for use against circulating influenza viruses. The adamantanes (amantadine and rimantadine) are not recommended because of high levels of resistance to these drugs among recently circulating influenza A (H3) and 2009 H1N1 pandemic viruses.
9. **Treatment with antiviral agents:** Clinical judgement is an important factor in treatment decisions for patients presenting with influenza-like illness. Prompt empiric antiviral treatment with influenza antiviral medications is recommended while results of definitive diagnostic tests are pending, or if diagnostic testing is not possible, for patients with clinically suspected influenza illness who have:
 - a. Illness requiring hospitalization
 - b. Progressive, severe or complicated illness, regardless of previous health status
 - c. Patients at increased risk for severe disease

Do not delay antiviral treatment, when clinically indicated, pending definitive laboratory confirmation of influenza. Influenza antiviral medications are most effective when initiated within 2 days of illness, but these medications may also provide benefits for severely ill patients when initiated even after 2 days.

Point of care rapid tests capable of detecting influenza A and B virus infections are available, but health care providers and public health personnel should be aware that rapid influenza diagnostic tests have limited sensitivity and false negative results are common. Thus, negative results from rapid influenza diagnostic test should not be used to guide decisions regarding treating patients with influenza antiviral medications. In addition, false positive tests can occur and are more likely when influenza is rare in the community. When laboratory confirmation is desired, testing by RT-PCR and/or viral culture is recommended.

10. **Antiviral agents for outbreak control:** Used in conjunction with vaccination and behavioral measures, including droplet precautions and cohorting of ill residents, antiviral agents are a key component of outbreak control in long-term care facilities and other institutional settings. Antiviral chemoprophylaxis should be considered following identification of any laboratory-confirmed case of influenza or in the presence of more than one resident meeting criteria for influenza-like illness (see above definition) in a facility or area of the facility.
 - When antiviral agents are used for outbreak control, they should be administered to all residents (include all employees if variant strain is found that is not well matched to vaccine), regardless of immunization status.
 - All unvaccinated staff should be re-offered influenza vaccine. They should also be offered chemoprophylaxis if they care for persons at high risk for complications.
 - All staff, regardless of vaccination status, should be offered chemoprophylaxis if there are any indications that the outbreak is caused by a variant strain of influenza that is not covered by the vaccine.
 - The drugs should be continued for a minimum of 2 weeks and as long as 10 days after

the last onset of symptoms.

- The antiviral dose for each resident is determined based on age, renal function, liver function and other pertinent characteristics.
- During institutional outbreaks, chemoprophylaxis also can be offered to unvaccinated staff members who provide care to persons at high risk of complications.
- Pre-approved medication orders, or plans to obtain physician's orders on short notice, should be in place to ensure that chemoprophylaxis can be started as soon as possible.

If there is a variant strain or unusual circumstances occurring during a season, MDPH will issue appropriate bulletins and advisories. ACIP recommendations and additional guidance from CDC can be found at www.cdc.gov/flu/professionals/antivirals/.

Clinicians should be alert to changes in antiviral recommendations that might occur as additional antiviral resistance data becomes available during the 2012-2013 season.

Additional Information

CDC. Prevention and Control of Influenza with Vaccines: Recommendations of the ACIP, 2012. MMWR August 17, 2012;613-618. www.cdc.gov/mmwr/pdf/wk/mm6132.pdf

CDC. Antiviral agents for the treatment and chemoprophylaxis of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2011;60 (No. RR-1). www.cdc.gov/mmwr/pdf/rr/rr6001.pdf

CDC. Influenza vaccination of health-care personnel: recommendations of the Healthcare Infection Control Practices Advisory (HICPAC) and the Advisory Committee on Immunization Practices (ACIP) 2006;55(No. RR-2). www.cdc.gov/mmwr/preview/mmwrhtml/rr5502a1.htm.

CDC. Prevention of pneumococcal disease: recommendations of the ACIP. MMWR 1997;46 (No. RR-8). www.cdc.gov/mmwr/preview/mmwrhtml/00047135.htm

CDC. Updated Recommendations for Use of Tetanus Toxoid, Reduced Diphtheria Toxoid, and Acellular Pertussis (Tdap) Vaccine in Adults Aged 65 Years and Older —ACIP, 2012. MMWR 2012;61(N0. 25):468-470. www.cdc.gov/mmwr/pdf/wk/mm6125.pdf

Package inserts for all 2011-2012 approved influenza vaccine formulations:
www.immunize.org/fda/pa_influenza.asp

Visit the MDPH web site www.mass.gov/dph/flu. Hard copies and technical consultation are available by calling MDPH at 617-983-6800 or 888-658-2850.